

AMENDMENTS TO THE SPECIFICATION WITH MARKINGS TO SHOW CHANGES MADE

Change the title to read -- METHOD AND APPARATUS FOR INTRODUCING A ROADWAY SUPPORT --.

Before paragraph [0001], add the heading --BACKGROUND OF THE INVENTION--.

Amend the following paragraphs:

[0001] -- The invention relates~~[[, on one hand,]]~~ to a method of introducing a roadway support in parallel to a face advancement of a gallery by means of a selective cut heading machine ~~according to the features set forth in the preamble of claim 1.--~~.

[0002] -- ~~On the other hand, the~~ The invention also relates to an apparatus for carrying out the method ~~according to the features set forth in the preamble of claim 1.--~~.

Before paragraph [0005], add the heading --SUMMARY OF THE INVENTION--.

Amend the following paragraphs:

[0006] -- With respect to the method, this object is attained by ~~the characterizing features of claim 1~~ a method for introducing a roadway support in parallel to a face advancement of a gallery by means of a selective cut heading machine, wherein lagging mats in the form of rolled mats are arranged downstream of the cutting tool of the selective cut heading machine in circumferential offset relationship in two transverse planes extending behind one another in longitudinal heading direction, then are unrolled in lateral overlapping disposition in longitudinal heading direction simultaneously with the face advancement and immediately aligned upon the rock, and that following the

complete unwinding of the lagging mats these working steps are successively repeated in accordance with the length of the face advancement with new lagging mats which adjoin the previously laid lagging mats, with the roadway support being introduced at a distance to the cutting tool as the lagging mats) are fixed.--.

[0012] -- It is especially advantageous ~~in accordance with the features of claim 2~~ that the unrolled lagging mats are aligned upon the rock by a self-propelling lagging manipulator. This lagging manipulator provides a reliable positioning of the lagging mats upon the rock so that the respective roadway support can then easily be introduced.--.

[0014] -- ~~According to the features of claim 3, it~~ It is of advantage to couple the ends of the previously laid lagging mats, which optionally may already be underpinned by a roadway support, with the ends of the newly unrolled lagging mats. Such a coupling can be realized only through overlapping or also through a direct joining of lagging mats that are arranged in succession in longitudinal heading direction.--.

[0015] --According to the another features feature of ~~claim 4~~ the invention, the lagging mats may be fixed by roof bolting upon the rock.--

[0016] --It is also conceivable ~~according to the features of claim 5~~ to securely fix the lagging mats in place by means of supporting frames (arch support, frame timbering).--.

[0018] -- With respect to the apparatus, the object of the invention is attained by ~~the characterizing features of claim 6~~ an apparatus for carrying out the method for introducing a roadway support in parallel to a face advancement of a gallery by means of a selective cut heading machine, which apparatus includes a lagging manipulator which is movable independently of the selective cut heading

machine in longitudinal heading direction for introducing and aligning lagging mats downstream of the cutting tool of the selective cut heading machine and includes mat cartridges for receiving lagging mats in the form of rolled mats in circumferential offset relationship in two transverse planes extending behind one another in longitudinal heading direction, wherein the mat cartridges in a 1st transverse plane are hereby arranged at a gap to the mat cartridges of the other 2nd transverse plane.--.

[0022] -- It is suitable ~~in accordance with the features of claim 7~~ to provide the mat cartridges with self-adjusting restraining or tensioning mechanisms for the mat rollers.--.

[0023] --In order to be able to correctly place and align the lagging mats upon the surface area of the rock, it is provided ~~in accordance with claim 8~~, to provide the lagging manipulator with a height control. With the assistance of the height control, a certain distance of the lagging mats to the surface area of the rock can be realized during unrolling in the central length portion of each mat cartridge. As the lagging mats extend, e.g., during arch support in the form of a chord in relation to the surface area, an intentional biasing force is built up in concert with the restraining and tensioning mechanisms of each mat cartridge for the later introduction of the roadway support.--.

[0024] --Associated to the height control are ~~in accordance with claim 9~~ distance sensors in the form of, e.g., laser sensors. With the aid of these distance sensors, a technically feasible minimum distance can be reliably maintained between the lagging mats and the surface area of the rock.--.

[0025] --When~~[[,]] in accordance with the features of claim 10~~, the lagging manipulator is moved along at least one overhead track, the height control is provided preferably upon a boom of the lagging manipulator.--.

[0026] --According to ~~claim 11 to another feature of the invention~~, in a lagging manipulator which is guided on the gallery floor and/or drift wall, the distance of the rolled-off lagging mats in relation to the surface area of the rock can be realized in particular with hydraulically-operated cylinders.--.

Before paragraph **[0027]**, add the heading --BRIEF DESCRIPTION OF THE DRAWING--.

Before paragraph **[0033]**, add the heading --DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS--.

Amend the following paragraphs:

[0035] -- In order to be able to execute setting of the roof bolting 7 at the same time as the tunneling of the gallery 1 takes place, a lagging manipulator 13 is provided directly behind the cutting tool 3 of the selective cut heading machine 2 and is suspended from the track 12 like the roof drilling platform 9 for movement along the track. The lagging manipulator 13 can be guided on a roadway floor and/or roadway end, for example by an overhead monorail conveyor or gantry-guided as crawler or travel mechanism.--.

[0037] --When jointly viewing Figs. 1 to 5, it can be seen that the lagging manipulator 13 includes mat cartridges 16, 17 which are arranged in two transverse planes 14, 15 extending behind one another in longitudinal heading direction. Lagging mats 18, 19 in the form of rolled mats 20, 21 are rolled up in these mat cartridges 16, 17. The mat cartridges 16, 17 are each provided with a self-adjusting restraining and tensioning mechanism ~~mechanisms~~ which are not in the form of a biased inner roll 200, as shown in greater detail Fig. 3. In addition, the boom for the lagging manipulator 13 is equipped with a height control as well as distance sensors by which the distance of lagging mats 18, 19 to be introduced can be precisely set in relation to the cleared surface area 22 of the gallery 1. As shown in particular in Fig. 3, the height control is implemented by cylinders 101,

which are supported on the floor 6 of the gallery 1 for vertically adjusting the entire frame, and cylinders 100, which act directly on the inner roll 200 of the rolled mats 20, 21.--.

Page 9, delete completely.

Page 10, after the heading "PATENT CLAIMS" and before the first claim add --
What is claimed is:--.